

INTRODUCTION

1. The statistical tables given on pages 8-17 and the summaries in tables A-G below are based on information supplied to the University Grants Committee by universities in Great Britain, i.e. by seventeen universities in England (Birmingham, Bristol, Cambridge, Durham, Exeter, Hull, Keele, Leeds, Leicester, Liverpool, London, Manchester, Nottingham, Oxford, Reading, Sheffield and Southampton), one in Wales (the University of Wales) and four in Scotland (Aberdeen, Edinburgh, Glasgow and St. Andrews).
2. The tables refer only to students who qualified for first degrees in arts and social studies, in pure science and in applied science (including agriculture and forestry, but excluding medicine, dentistry and veterinary science) during the period 1st October, 1961 to 30th September, 1962. Students who qualified for first external degrees of the University of London are included, as are those students of the Manchester College of Science and Technology and the Royal College of Science and Technology, Glasgow who qualified for first degrees of Manchester University and Glasgow University respectively. The tables state the position on the basis of information available up to 31st December, 1962.
3. The collection of the information presents problems of classification. First, the classification of degree subjects as between arts and social studies, pure science and applied science, must to some extent be arbitrary. For the purpose of the returns, however, the universities have adopted a uniform system of classifying degree subjects; information about the classification used is given in Appendix I. Secondly, there are problems in distinguishing between certain types of further study and training and in defining the column headings in Tables 1-5; the definitions used are given in the notes on pages 18-19. Thirdly, it has been necessary to lay down a standard employment classification; the employment categories used in Tables 6-10 are defined in the notes on pages 19-21. Only full-time employment qualifies for inclusion in Tables 1-6; employment which may be of a temporary nature is included provided that it is full-time while it lasts, e.g. some of those shown as employed in schools may have gone into teaching on a temporary basis; they are nevertheless included in the figures if they are teaching full-time.
4. In most universities the information is collected by appointments' secretaries or by officials dealing with appointments work, who normally obtain the basic detail by means of questionnaires completed by the graduates. Graduates, however, sometimes change their plans after notifying the university authorities that they have taken up, or intend to take up, some form of employment. Probably the most common change is where a graduate does well in his examinations and decides to withdraw his acceptance of an offer of employment in order to continue his studies. Changes of this kind may not come to the notice of appointments' secretaries before the return is completed, and it is therefore possible that some of the detail given in the tables is not up to date. They are, however, presented as the most complete information at present available of what happens to graduates shortly after taking their first degrees.

5. The returns show that 16,736 men and 5,338 women qualified for first degrees in arts and science during the period 1st October, 1961 to 30th September, 1962. The distribution of these graduates between arts and social studies, pure science and applied science is shown in the following table:—

Table A

	Men	As per-cent-age of total men	Women	As per-cent-age of total women	Total	As per-cent-age of total
Arts and social studies ..	7,445	44.5	3,792	71.0	11,237	50.9
Pure science ..	5,281	31.5	1,474	27.6	6,755	30.6
Applied science ..	4,010	24.0	72	1.4	4,082	18.5
TOTAL	16,736	100	5,338	100	22,074	100

6. The total number of men and women shown in Table A as having qualified for first degrees in the year ended September, 1962 at 22,074 was slightly less than in 1960-61, a loss of 150 in the arts having been only partially offset by a gain of 80 in pure science. Proportionately there was practically no change. The total number of men at 16,736, was about 250 less than in the previous year, thus reversing a progressive increase since 1957-58. This decline was entirely in arts and social studies. The number of men having taken degrees in pure and applied science was much the same as in 1960-61. Two years previously they were equally divided between pure and applied science, but in 1960-61 some 500 in applied science were lost to the advantage of pure science which has continued to hold this gain. The increase of about 160 in the number of women in these returns was mainly in the faculty of arts and social studies with a gain of over 100.

7. In Tables 1-5 (pages 8-12) men and women in each of these three main groups are distinguished according to degree subject. The tables also give the distribution of the graduates between further education or training and entry into employment. The information set out in detail in Tables 1-5 may be summarised as follows:—

Table B. Arts and Social Studies

	Men		Women		Total	
	Number	Per cent.	Number	Per cent.	Number	Per cent.
Undertaking further education or training	2,931	39.4	2,114	55.7	5,045	44.9
Gained employment:						
(a) Home	2,922	39.3	1,098	29.0	4,020	35.8
(b) Overseas	173	2.3	74	1.9	247	2.2
Overseas students returned to their own countries ..	280	3.7	56	1.5	336	3.0
Not available for employment	423	5.7	189	5.0	612	5.4
Seeking employment at 31st December, 1962	244	3.3	112	3.0	356	3.2
Unknown at 31st December, 1962	472	6.3	149	3.9	621	5.5
TOTAL	7,445	100	3,792	100	11,237	100

Table C. Pure and Applied Science

	Men				Women		Total	
	Pure Science		Applied Science		Pure and Applied Science		Pure and Applied Science	
	Num- ber	Per cent.	Num- ber	Per cent.	Num- ber	Per cent.	Num- ber	Per cent.
Undertaking further education or training ..	2,657	50.3	702	17.5	643	41.6	4,002	36.9
Gained employment:								
(a) Home ..	1,983	37.6	2,539	63.3	755	48.8	5,277	48.7
(b) Overseas ..	98	1.9	113	2.8	22	1.4	233	2.2
Overseas students returned to their own countries ..	54	1.0	231	5.8	13	0.8	298	2.8
Not available for employment ..	171	3.2	193	4.8	52	3.4	416	3.8
Seeking employment at 31st December, 1962..	148	2.8	113	2.8	24	1.6	285	2.6
Unknown at 31st December, 1962 ..	170	3.2	119	3.0	37	2.4	326	3.0
TOTAL ..	5,281	100	4,010	100	1,546	100	10,837	100

8. Table B shows that, taking men and women together, 44.9 per cent. of the graduates in arts and social studies undertook further education or training and 38 per cent. entered employment. Compared with 1960-61, a higher proportion went on to further education or training and a lower proportion entered employment. The proportion of "unknowns" has remained constant for several years, but the proportion of those seeking employment at 31st December increased from 2.5 per cent. in 1961 to 3.2 per cent. in 1962. It should, however, be noted that this increase is accounted for mainly by the fact that the proportion of women graduates in arts and social studies seeking employment at 31st December rose from 1.5 per cent. in 1961 to 3 per cent. in 1962.

9. There are noticeable differences between the destinations of the men and the women who graduated in arts and social studies. Of the women, 55.7 per cent. undertook further education or training compared with 39.4 per cent. of the men. However, within this group it should be noted that while 13.1 per cent. of the men undertook research or further academic study, only 7.1 per cent. of the women did so (see tables 1 and 2, pages 8-9). On the other hand, the proportion of women who trained for specific occupations was higher than the proportion of men. In this connection, the differences in the proportions who took teacher training are particularly marked, the figures being 34.5 per cent. for the women, and 17.9 per cent. for the men (see Tables 1 and 2, pages 8-9).

10. Table C shows some marked differences from Table B. Taking the men and women graduates in pure and applied science together, proportionately fewer of them undertook further education and training than did the men and women graduates in arts and social studies. By contrast, just over 50 per cent. of the

men and women graduates in pure and applied science entered employment shortly after graduation; the comparable figure for men and women in arts and social studies being 38 per cent.

11. In 1961-62 overseas employment (as defined in Note 9 to Tables 1-5, page 19) does not on the whole appear to have been more attractive for pure and applied scientists than for those who graduated in arts and social studies. For both groups the proportion who took employment overseas was just over 2 per cent. If the pure scientists and applied scientists are contrasted it will be seen that overseas employment took a relatively larger number of the applied scientists than of the pure scientists. Taking the pure and applied scientists together the proportion who take employment overseas has remained steady at about 2 per cent. for the past few years.

12. When the men graduates in pure science are looked at separately it is seen that just over 50 per cent. undertook further education or training. These men, unlike the men graduates in arts and social studies, went mainly to research or further academic study (31.2 per cent.) and only 14.1 per cent. to teacher training (see Table 3, page 10). The proportion of men in pure science seeking employment at 31st December, 1962 (2.8 per cent.), was higher than at 31st December, 1961, when the proportion was 1.6 per cent.

13. As would be expected, the distribution of the men applied scientists is different from the distribution of the men pure scientists. Table C shows that, while almost exactly 66 per cent. of the men applied scientists entered employment, only 17.5 per cent. undertook further education or training. These proportions illustrate the fact that the normal practice is for applied scientists to complete their professional training while in employment rather than to undertake postgraduate study. As with the pure scientists, the proportion of men applied scientists seeking employment at the end of 1962 (2.8 per cent.) was higher than in 1961 when the proportion was 0.8 per cent.

14. In Table C the women pure and applied scientists are shown together. This is because there are too few women applied scientists (72 in 1962) to justify a separate category. From Table C it will be seen that 41.6 per cent. of the women pure and applied scientists undertook further education or training. Within this category, almost twice as many of the women took teacher training as went on to research or further academic study (see Table 5, page 12).

15. Just over 50 per cent. of the women pure and applied scientists entered employment compared with 30.9 per cent. of the women graduates in arts and social studies. In contrast to other groups, the proportion of women pure and applied scientists seeking employment at the end of 1962 was slightly lower than at the end of 1961.

16. Tables 6-10 (pages 13-17) show the distribution according to types of employment and the degree subject of the 7,444 men and 1,853 women who "gained employment—home". The information set out in Tables 6-10 may be summarised as follows:—

Table D. Arts and Social Studies

	Men		Women		Total	
	Number	Per cent.	Number	Per cent.	Number	Per cent.
Public Service (other than Education)	406	13.9	239	21.8	645	16.0
Education*	583	19.9	535	48.7	1,118	27.8
Industry and Commerce	1,358	46.5	189	17.2	1,547	38.5
All other employment	575	19.7	135	12.3	710	17.7
TOTAL	2,922	100	1,098	100	4,020	100

Table E. Pure and Applied Science

	Men				Women		Total	
	Pure Science		Applied Science		Pure and Applied Science		Pure and Applied Science	
	Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.
Public Service (other than Education)	184	9.3	263	10.4	173	22.9	620	11.8
Education*	390	19.7	71	2.8	327	43.3	788	14.9
Industry and Commerce	1,316	66.3	2,156	84.9	221	29.3	3,693	70.0
All other employment	93	4.7	49	1.9	34	4.5	176	3.3
TOTAL	1,983	100	2,539	100	755	100	5,277	100

17. In considering Tables D and E (and also the detailed Tables 6-10) it is important to note that the figures and proportions given refer only to the graduates who gained employment at home, and the tables account for just over 42 per cent. of the total of 22,074 first degree graduates of 1961-62. This point is particularly relevant in considering the entry into education. Tables D and E show that a total of 1,906 graduates gained employment in education, but in order to obtain a more complete picture it is necessary also to take into account the total of 3,820 graduates who (as shown in Tables 1-5, pages 8-12) undertook teacher training in 1962 and most of whom will find employment in schools in 1963. Similarly, in considering the entry into industry and commerce allowance must be made for the fact that a proportion of the pure and applied scientists who undertook research or further academic study will eventually find employment in industry.

* Education includes only those graduates who take employment in schools, colleges and universities without doing postgraduate training. Whilst the majority will be teachers there are a few who take administrative posts in these institutions, and some who work as salaried research assistants, chiefly in the universities. The distribution of these graduates between schools, colleges and universities is shown in Tables 6-10. Graduates who take teacher training before entering employment are not included in Tables D and E but are included among those undertaking further study or training in Tables B and C. For a detailed analysis by subject of those graduates who take teacher training see Tables 1-5.

18. With these reservations in mind it can be noted that about 47 per cent. of the men who graduated in arts and social studies and who gained employment at home in 1962 went into industry and commerce, and about 20 per cent. into education. For women graduates in arts and social studies the proportions were nearly reversed.

19. Of the men graduates in pure science who gained employment at home, 66 per cent. entered industry and commerce, and 20 per cent. education. The proportions for the men applied scientists are 85 per cent. into industry and commerce and 10 per cent. (mainly civil engineers) to the public service. The public service also attracted 23 per cent. of the women pure and applied scientists who gained employment at home, while education took 43 per cent. and industry and commerce 29 per cent. of these graduates.

20. The following table presents the salient features of the summary Tables A-E to show what happens to every 100 men and women when they graduate in arts and social studies and in pure and applied science.

Table F

	Arts and Social Studies			Pure Science	Applied Science	Pure and Applied Science	
	Men	Women	Total	Men		Women	Total
	100	100	100	100	100	100	100
Number graduating							
Undertaking further education or training:—							
(a) Research or further academic study	13	7	11	31	16	13	23
(b) Teacher training	18	35	24	14	1	25	11
(c) Other training	9	14	10	5	..	4	3
(Total)	(40)	(56)	(45)	(50)	(17)	(42)	(37)
Gained employment at home in:—							
Public Service	5	6	6	4	6	11	6
Education*	8	14	10	7	2	21	7
Industry and Commerce ..	18	5	14	25	54	15	34
All other home employment	8	4	6	2	1	2	2
(TOTAL)	(39)	(29)	(36)	(38)	(63)	(49)	(49)
Gained employment overseas ..	2	2	2	2	3	1	2
Overseas students returned to their own countries	4	1	3	1	6	1	3
Not available for employment ..	6	5	5	3	5	3	4
Seeking employment at 31st December, 1962	3	3	3	3	3	2	2
Unknown at 31st December, 1962	6	4	6	3	3	2	3

21. The general trend over recent years is indicated in Table G which shows for every 100 graduates in Arts and Social Studies and Pure and Applied Science the employment taken up during 1957-58, 1959-60 and 1961-62. The figures

* See footnote to Tables D and E on page 5.

however must be interpreted with some reservation in so far as comparability may be affected by two considerations in particular. The collection of the data was undertaken for the first time in 1957-58 when the records were somewhat less reliable than for subsequent years. Practice and experience have naturally improved the validity of the material in these tabulations with the result that strict comparability over the five years may have been impaired. Secondly, the ending of National Service had its effect on the figures. This change was not uniform in its effect since it applied with varying emphasis to the different faculties. It is not thought, however, that either of these considerations is likely to affect comparability at all seriously.

Table G

	Arts and Social Studies			Pure and Applied Science		
	1957-58	1959-60	1961-62	1957-58	1959-60	1961-62
	100	100	100	100	100	100
Number graduating						
Undertaking further education or training:-						
Research or further academic study	7	9	11	22	22	23
Teacher training	26	24	24	9	10	11
Other training	11	11	10	6	3	3
(TOTAL)	(44)	(44)	(45)	(37)	(35)	(37)
Gained employment at home in:-						
Public Service	4	6	6	4	6	6
Education*	8	11	10	7	7	7
Industry and Commerce ..	11	15	14	31	38	34
All other home employment ..	8	6	6	1	2	2
(TOTAL)	(31)	(38)	(36)	(43)	(53)	(49)
Gained employment overseas ..	2	2	2	2	2	2
Overseas students returned to their own countries	4	3	3	3	3	3
Not available for employment ..	12	5	5	11	4	4
Seeking employment at 31st December, 1962	2	2	3	1	1	2
Unknown at 31st December, 1962	5	6	6	3	2	3

* See footnote to Tables D and E on page 5.

Table 1. Distribution between Further Education, Training and Employment of MEN who qualified for first degrees in Arts and Social Studies, 1961-62

Degree Subject	Total graduating	Undertaking further education or training						Overseas students returned to own countries	Otherwise not available for employment	Claimed employment	Seeking employment	Unknown					
		Research or further academic study		Teacher Training	Training for Social work	Training for Oriental Civilisa- tion	Other Training										
		Home	Overseas														
Classics	111	111	396	58	11	83	1	4	10	6	4	12	28				
Commerce	111	111	248	9	3	4	—	3	37	28	163	112	15				
Economics	111	111	745	51	24	59	1	1	12	48	95	454	37				
English	111	111	560	67	12	152	1	5	20	14	15	274	45				
Geography	111	111	489	57	11	167	2	1	15	4	36	185	50				
History	111	111	912	102	24	222	2	24	33	24	36	485	16				
Languages, Modern West European	111	111	749	71	20	223	2	3	45	3	16	364	8				
Languages and Area Studies, Oriental and African	111	111	105	19	4	4	—	3	—	6	2	43	27				
Languages and Area Studies, Slavonic and East European	111	111	47	5	5	6	—	1	188	63	6	23	4				
Law	111	111	1,026	263	13	6	1	3	9	3	77	475	1				
Physiology	111	111	113	26	4	6	1	1	127	3	13	51	4				
Social Studies and Anthropology	111	111	157	15	6	12	1	1	—	6	19	95	10				
Theology	111	111	267	16	7	18	1	1	—	—	19	67	5				
Combined or General Courses	111	111	373	52	7	216	1	1	29	17	13	90	4				
Arts, Economic, Social Studies Economic, Political, Social Studies	111	111	598	52	24	104	2	15	17	33	21	317	5				
Other subjects	111	111	189	9	4	5	—	2	6	6	10	163	14				
Other subjects	111	111	364	75	6	41	—	4	6	11	26	195	17				
Total	111	111	7,445	789	185	1,330	1	15	223	389	423	3,811	173				
Percentage of total graduates	111	111	100	10.6	2.5	17.9	0.2	3.0	5.2	3.7	5.7	51.2	3.5				
1st Class Honours	111	111	375	183	18	26	—	6	6	8	12	116	8				
2nd Class Honours	111	111	4,314	459	116	834	12	93	231	135	2,219	1,737	4				
Others	111	111	2,756	147	31	470	3	124	132	137	1,476	1,059	222				

Table 2. Distribution between Further Education, Training and Employment of WOMEN who qualified for first degrees in Arts and Social Studies, 1961-62

Degree Subject	Total gradu- ates	Undertaking further education or training						Overseas students returned to own countries	Otherwise not available for employ- ment	Gained employment	Seeking employ- ment	Unknown					
		Research or further academic study		Teacher Training	Training for Social work	Secretarial Training	Other Training										
		Home	Oversize														
Classics	11	11	11	139	15	—	53	2	4	39	3	4					
Commerce	11	11	11	9	—	—	—	—	—	50	—	8					
Economics	11	11	11	62	5	4	8	3	4	37	4	5					
English	11	11	11	542	40	6	194	8	33	19	12	15					
Geography	11	11	11	249	16	3	121	2	10	5	10	2					
History	11	11	11	406	35	7	129	11	34	10	7	17					
Languages, Modern West European Languages and Area Studies	11	11	11	714	28	12	233	11	56	51	30	21					
Oriental and African Studies	11	11	11	8	2	—	—	2	—	1	3	—					
Languages and Area Studies Slavonic and East European	11	11	11	24	3	1	2	1	4	12	11	—					
Law	11	11	11	93	6	2	2	1	1	5	41	36					
Psychology	11	11	11	64	8	1	8	1	3	9	12	3					
Social Studies and Anthropology	11	11	11	227	12	7	12	36	3	17	132	33					
Theology	11	11	11	61	5	—	30	—	2	4	20	11					
Cumulated or General Courses—																	
Arts	11	11	11	738	17	2	345	20	55	28	37	14					
Art, Economic, Social Studies	11	11	11	280	11	3	117	11	16	10	100	6					
Other subjects	11	11	11	133	12	5	39	2	2	4	2	10					
Total	11	11	11	3,792	217	53	1,308	110	257	169	56	112					
Percentage of total gradu- ates	11	11	11	100	5.7	1.4	34.5	2.9	6.8	4.4	1.5	3.0					
1st Class Honours	11	11	11	118	51	13	20	—	2	4	41	27					
2nd Class Honours	11	11	11	2,009	131	30	732	52	141	107	50	67					
Others	11	11	11	1,445	35	10	536	38	114	57	24	24					

Table 3. Distribution between Further Education, Training and Employment of MEN who qualified for first degrees in Pure Science, 1961-62

Degree Subject	Total gradu- ating	Undertaking further education or training						Otherwise not available for employ- ment	Gained employment	Seeking employ- ment	Unknown				
		Research or further academic study		Teacher Training	Training for Social work	Older Training	Overseas students sent to own countries								
		Home	Overseas												
Biochemistry	114	68	2	3	—	3	1	—	37	26	3				
Botany	175	75	5	24	—	5	3	—	66	41	6				
Chemistry	1,223	526	14	144	—	3	9	22	435	12	12				
Geology	189	98	10	11	—	4	3	3	59	22	33				
Mathematics	649	183	6	108	—	—	8	18	370	278	29				
Medicine	1466	278	—	—	—	—	—	—	103	22	9				
Pharmacy/Pharmacology	1,080	266	19	115	—	5	12	25	114	108	2				
Physics	273	44	1	—	3	212	1	1	535	471	17				
Physiology and/or Anatomy	193	80	4	42	—	1	3	4	13	7	5				
Zoology	—	—	—	—	—	—	—	—	38	6	9				
Combined or General Courses	21	4	—	1	—	3	—	1	12	11	1				
Arts/ Biological Sciences	90	11	2	24	—	1	1	—	50	38	—				
Biological Sciences	136	24	2	34	—	1	1	15	56	38	2				
Biological/Physical Sciences	116	15	1	30	—	—	—	15	53	1	10				
Mathematics/Physics	340	32	—	75	—	4	2	22	265	169	4				
Other Physical Sciences	560	41	6	132	—	—	—	43	263	211	6				
Other subjects	34	21	1	—	—	—	1	—	10	9	1				
Total	3,281	1,573	73	744	2	13	232	34	171	2,399	983				
Percentage of total gradu- ates	100	29.8	1.4	14.1	—	0.3	4.6	1.0	3.2	45.4	37.6				
1st Class Honours	551	396	10	16	—	—	29	2	9	89	81				
2nd Class Honours	2,511	1,055	48	261	—	1	10	43	23	64	51				
Others	2,152	122	15	467	—	1	—	—	29	98	1,123				

Table 4. Distribution between Further Education, Training and Employment of MEN who qualified for first degrees in Applied Science, 1961-62

Degree Subject	Total gradu- ating	Undertaking further education or training				Overseas students returned to own countries	Otherwise not available for employ- ment	Gained employment	Seeking employ- ment	Unknown					
		Research or further academic study		Teacher Training	Training for Social work										
		Home	Overseas												
Archaeology and Forestry	393	82	23	10	—	3	33	8	233	167	27				
Architecture and Town and Country Planning	71	6	—	2	—	6	2	1	56	50	1				
Engineering, Aerautical:	1038	14	3	8	1	2	1	8	78	74	2				
Chemical	431	98	9	11	1	—	23	1	291	246	8				
Civil	692	52	11	14	1	—	43	21	532	511	17				
Electrical	784	94	6	14	—	—	3	63	563	504	15				
General	269	21	5	3	—	—	31	31	205	177	18				
Marine	13	—	—	—	—	—	5	—	3	2	19				
Mechanical	777	66	9	2	—	1	47	57	535	515	11				
Meteorology	253	72	2	6	—	—	4	2	166	144	16				
Other Applied Sciences	249	50	5	7	—	1	18	1	176	144	10				
Total	4,010	555	73	33	2	4	15	231	193	2,884	2,539				
Percentage of total gradu- ates		13.9	1.4	1.4	...	0.1	0.4	5.8	4.8	71.9	63.3				
1st Class Honours	344	107	20	2	—	—	1	5	3	201	185				
2nd Class Honours	1,674	345	33	16	—	2	9	79	1,033	5	4				
Others	1,592	103	20	35	1	2	—	171	1,545	49	27				
								105	1,121	39	85				
											3.40				

Table 5. Distribution between Further Education, Training and Employment of WOMEN who qualified for first degrees in Pure and Applied Science, 1961-62

Degree Subject	Total gradua- tion	Undertaking further education or training				Overseas students returned to own countries	Otherwise not available for employ- ment	Gained employ- ment	Seeking employ- ment	Unknown	
		Research or further academic study		Teacher Training	Secret- arial Training						
		Home	Overseas	Home	Overseas						
Biochemistry	49	7	3	31	1	4	—	31	27	1	3
Botany	154	29	2	38	1	2	—	46	44	1	1
Chemistry	158	21	4	69	1	1	—	58	55	1	—
Geology	113	4	1	—	—	—	3	149	140	4	2
Mathematics	243	17	3	—	—	—	—	95	90	1	3
Pharmacology/Pharmaceutics	104	7	1	22	—	2	—	56	50	1	3
Physics	98	11	4	3	—	—	2	10	5	3	4
Physiology and/or Anatomy	63	—	—	40	2	—	1	62	50	3	2
Zoology	140	23	3	—	—	1	—	—	—	6	3
Combined or General Courses—											
Arts/Biological Sciences	14	—	—	1	—	—	—	10	8	1	1
Arts/Physical Sciences	31	1	—	16	—	2	—	11	8	—	2
Biological Sciences	128	4	1	36	—	3	—	69	61	1	6
Biological/Physical Sciences	73	7	—	21	—	3	—	38	35	1	5
Mathematics/Physics	94	2	—	37	1	—	—	51	44	—	2
Other Physical Sciences	119	3	—	52	2	—	—	48	—	2	3
Other Science subjects	23	8	1	4	—	—	1	8	5	1	—
Applied Science subjects	72	8	3	9	—	—	1	5	40	3	1
Total	1,546	27	385	6	14	47	13	52	755	22	37
Percentage of total gradu- ates	100	10.6	1.8	24.9	0.4	0.9	3.0	0.8	3.4	1.4	2.4
1st Class Honours	107	39	7	15	—	—	7	1	2	32	1
2nd Class Honours	701	100	20	153	1	3	32	8	14	319	17
Others	736	25	—	217	5	11	8	6	32	432	24

Table 6. Analysis of Employment Categories for MEN who qualified for first degrees in Arts and Social Studies 1961-62

Employment Category	Degree subject	Total									
		Others	Book, Magazine and News-paper Publishers	Legal Profession	Commerce	Builders, Contractors, Civil Engineers, Contractors and Traders	Trade Unions, Trade Federations, Committees and Commissions of Architects, C.B., T.U.C.A.E.L.A. and N.C.B.	Post Office, Telegraph and Transport Services	Metropolitan Cultural Organisations and Industries	Business and Entertainment Industries	Others
H.M. Home Civil Service and Foreign Services	Classics	22	2	1	13	5	4	1	1	1	4
Others	Commerce	2	—	—	15	21	24	10	13	3	4
Others	Economics	—	—	—	—	—	—	—	—	—	135
Others	English	—	—	—	17	73	10	8	1	3	333
Others	Geography	—	—	—	24	21	18	17	1	12	185
Others	History	—	—	—	10	20	27	33	4	8	146
Others	Languages, Modern, West European, Languages and Area Studies, Oriental and African	—	—	—	47	39	3	4	11	13	327
Others	Other Languages and Area Studies, Slavonic and East European	—	—	—	6	—	—	2	46	—	262
Others	Law	—	—	—	—	5	1	3	1	2	27
Others	Psychology	—	—	—	—	16	2	3	1	1	18
Others	Social Studies and Anthropology	—	—	—	47	13	13	15	3	4	475
Others	Theology	—	—	—	1	47	—	—	—	—	40
Others	Combined or General Courses	—	—	—	—	1	—	—	—	—	67
Arts, Economic, Political, Social Studies	Other subjects	2	1	4	9	1	23	24	2	—	2
Arts, Economic, Political, Social Studies	Other subjects	15	1	4	14	7	32	12	1	3	72
Total	Others	146	17	29	214	55	473	53	57	9	13
Percentage	Others	5.0	0.6	1.0	7.3	1.9	16.2	1.8	1.9	0.3	100
1st Class Honours	Others	—	—	—	—	—	—	—	—	—	100
2nd Class Honours	Others	—	—	—	—	—	—	—	—	—	100

Table 7. Analysis of Employment Categories for WOMEN who qualified for first degrees in Arts and Social Studies, 1961-62

Employment Category	Degree subject	Totals													
		Classics	Commerce	Economics	English	Geography	History	Languages and Area Studies, Oriental and African	Languages and Area Studies, Slavonic and East European	Law	Psychology	Social Studies and Anthropology	Theology	Combined or General Courses	Arts, Economic, Social Studies, Economic, Political, Social Studies	Other subjects
H.M. Home Office Services and Professional Services		5	—	—	—	—	—	—	—	—	—	—	—	—	—
Overseas Public Services		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Armed Services		18	—	—	—	—	—	—	—	—	—	—	—	—	—
Charities		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Schools		21	—	—	—	—	—	—	—	—	—	—	—	—	—
Technical Colleges and Polytechnics		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Universities		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Oil, Chemical and Allied Industries		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Engineering and Allied Industries		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Manufacturing Industries		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Building, Construction, Civil Engineering and Architecture		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Public Utility and Transport		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Trade Unions; T.U.C.A.E.A. and N.C.B.		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Prisons or Asylums		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Builders, Contractors, Civil Engineers and Architects		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Manufacturing Industries		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Commerce		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Commerce		—	—	—	—	—	—	—	—	—	—	—	—	—	—
Others		—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 8: Analysis of Employment Categories for MEN who qualified for first degrees in Pure Science, 1961-62

Table 9. Analysis of Employment Categories for MEN who qualified for first degrees in Applied Science, 1961-62

Employment Category	Degree subject	Degrees												Totals	
		1	2	3	4	5	6	7	8	9	10	11	12		
Agriculture and Forestry		22	8	—	—	9	8	10	60	12	2	12	—	9	167
Architecture and Town and Country Planning		—	3	—	—	15	—	—	—	—	—	—	—	—	50
Engineering, Aeronautical		—	1	—	—	1	—	—	—	—	—	—	—	—	74
Chemical		—	1	—	—	1	—	—	—	—	—	—	—	—	246
Civil		—	2	—	—	114	—	—	—	—	—	—	—	—	211
General		—	1	—	—	6	—	—	—	—	—	—	—	—	504
Mechanical		—	1	—	—	5	—	—	—	—	—	—	—	—	177
Metalurgy		—	15	—	—	3	—	—	—	—	—	—	—	—	7
Other Applied Sciences		—	2	—	—	4	—	—	—	—	—	—	—	—	515
Total	1444
Percentage	100
1st Class Honours	185
2nd Class Honours	1033
Others	1321

Table 10. Analysis of Employment Categories for WOMEN who qualified for first degrees in Pure and Applied Science, 1961-62

1. *Degree subjects*

See Appendix I.

2. *Undertaking further education or training*

Graduates proceeding to full-time and unpaid postgraduate study or training at home and overseas are included under this general heading, regardless of the institution where this takes place. Those who receive training whilst in employment, e.g. graduates articled to accountants, are shown as having gained employment.

3. *Research or further academic study*

This category comprises all graduates who undertake full-time postgraduate research or further academic study which does not provide a vocational or professional training. Thus most of the graduates proceeding to higher degree and university diploma courses are included here even though their courses may offer teaching and instruction in specialised fields such as numerical analysis, concrete technology or archaeology; graduates taking a second degree in a different subject, e.g. a French Literature graduate taking a degree in Oriental Studies, are also included. Graduates in physiology or anatomy who proceed to medical degree courses are included under "Other training" (see 8). Research workers receiving a taxable salary are classified as having gained employment.

In this context, "home" includes all research and further academic study based on United Kingdom academic institutions.

4. *Teacher training*

All graduates who undertake teacher training whether in university departments of education or teacher training colleges are put under this heading. Graduates who train abroad for a teaching qualification recognised in this country are also included.

5. *Training for social work*

Graduates who take professional social work courses (e.g. Home Office training in probation work) and university postgraduate courses in social studies (whether in applied case work or basic general principles) are classified as training for social work. Graduates taking courses specifically for personnel or housing management are shown under "other training" (see 8).

6. *Training for Ordination*

Graduates who train for the ministry of the various churches or who enter a religious order are included here. However because so few women graduates train for the church they are not shown separately in Tables 2 and 4 but are included under the heading of "other training".

7. *Secretarial training*

This is shown as a separate category only on Tables 2 and 4. Only those women graduates who undertake full-time secretarial training are included. Those who are paid a salary by employers during secretarial training are classified as having "gained employment".

8. *Other training*

In addition to the graduates mentioned in Notes 3 and 5 and the women graduates mentioned in Note 6, this category includes graduates studying full-time for the Bar or for the Law Society examinations and those taking postgraduate courses at universities or technical colleges in, e.g. archive administration, food quality control, landscape design, librarianship or town and country planning. Graduates who go abroad as "assistants" under the Ministry of Education scheme, or similar posts, are also included under this heading.

9. *Overseas students returned to their own countries.*

This category comprises those overseas students who return to their own countries after graduation whether to a job, or to further study or training. Overseas students who take employment in the United Kingdom—other than short-term temporary employment prior to returning home—are classified as "gained employment—home"; those gaining employment overseas in countries other than their own are classified as "gained employment—overseas".

10. *Otherwise not available for employment*

Under this heading are included those students who take their degrees whilst on leave from employment to which they will return, e.g. Service officers sent to universities to take degree courses; all graduates doing part-time work, e.g. women students who marry and do not take up full-time employment outside their homes; and students who, e.g. go on expeditions or travel.

11. *Balance available for employment*

This total is obtained by subtracting from the total qualifying for degrees, those undertaking further education or training, overseas students returning to their own countries, and those not otherwise available for full-time employment.

12. *Gained employment*

Those graduates who gain employment and notify their appropriate university authorities before 31st December are shown as having gained employment.

The purpose of the distinction between "gained employment—home" and "gained employment—overseas" is to show the number of graduates who may reasonably be assumed to be lost to the British market. Accordingly, graduates who may be working abroad on short-term contracts or who have been sent abroad by a British company are classified as "gained employment—home". By contrast, "gained employment—overseas" is defined as employment with companies registered overseas or in educational or other posts which are not on short-service contract terms.

13. *Seeking employment*

Only those graduates who are known to be seeking employment at the 31st December are included under this heading.

14. *Unknown*

These graduates have not replied to enquiries from their universities. It should not however be assumed that they are unemployed.

NOTES ON TABLES 6-10

1. *Degree subjects*

See Appendix I.

2. *Classification*

The employment classification used is a classification by the function of the employing authority making the appointment, regardless of the type of work. Account is taken only of full-time employment.

3. *Employment categories*

The categories of employment in the summary tables on page 5 comprise the following:—

PUBLIC SERVICE (other than Education)

H.M. Home Civil Service and Foreign Service

Overseas Public Service

Armed Services

Local Government Authorities and Hospital Services

EDUCATION

Schools

Technical Colleges and places of Further Education

Universities

INDUSTRY AND COMMERCE

Agriculture and Forestry

Oil, Chemical and Allied Industries

Engineering and Allied Industries

Other Manufacturing Industries

Builders, Contractors, Civil Engineering Consultants and Firms of Architects
Public Utility and Transport Undertakings; United Kingdom Atomic Energy

Authority and National Coal Board

Commerce, including:—

Banking

Insurance

Advertising and market research agencies

Retail trade

Firms of accountants

Other commercial employment

ALL OTHER EMPLOYMENT

Churches

Legal Profession

Book, Magazine and Newspaper Publishers

Miscellaneous Cultural Organisations and Entertainment Industry

Others

Where necessary the more detailed employment headings are defined in the following notes.

4. *H.M. Home Civil Service and Foreign Service*

In addition to central government departments this heading covers various research establishments which are wholly or largely sponsored by the government.

5. *Overseas Public Service*

This comprises the public services of the dependent or newly-independent territories of the British Commonwealth. The public services of, e.g. Canada, Australia and New Zealand are excluded, and graduates accepting employment with these are classified as having gained employment overseas.

6. *Local Government Authorities and Hospital Services*

River and drainage boards are included in this category.

7. *Schools*

This includes all schools in both the public and private sectors of education.

8. *Technical Colleges and Places of Further Education*

This category includes teacher training colleges, county agricultural colleges, farm institutes, commercial colleges, colleges of art and other colleges of further education.

9. *Agriculture and Forestry*

This includes employment in horticulture; and employment with the Forestry Commission as well as with private employers.

10. *Oil, Chemical and Allied Industries*

The oil industry is defined as companies engaged in oil mining, refining and distribution and in the manufacturing of petro-chemicals, together with consulting, prospecting and exploration companies working primarily on behalf of the oil industry. The chemical and allied industries are defined according to Standard Industrial Classification* Order IV plus firms of consultant chemists.

11. *Engineering and Allied Industries*

Defined according to Standard Industrial Classification* Orders V-IX, plus firms of mechanical and electrical engineering consultants whose work is closely connected with the engineering and allied industries.

12. *Other Manufacturing Industries*

Defined according to Standard Industrial Classification* Orders III and X-XVI, but excluding publishing which is included under the separate heading of book, magazine and newspaper publishers.

13. *Public Utility and Transport Undertakings; United Kingdom Atomic Energy Authority and National Coal Board*

This heading includes all gas, water, electricity and transport undertakings not run by local authorities. It includes other mining and quarrying undertakings as well as the National Coal Board. Exploration and survey companies closely associated with coal and metal mining are also included under this heading.

14. *Commerce*

Advertising and market research agencies, banking (including the Bank of England) and insurance companies, firms of accountants or consultant actuaries, the wholesale and retail distributive trades, shipping services, surveyors and estate agents, merchants, catering firms and property owning and management companies are included here. Whilst it is not possible to show separately the numbers of graduates joining each of these groups of employers, information is available about the numbers of graduates joining banking, insurance, advertising and market research agencies, the retail trade and firms of accountants.

15. *Legal Profession*

This category consists almost entirely of firms of solicitors. Graduates who are articled to solicitors working in local government are shown as working for local government authorities; those studying full-time for the Bar or for the Law Society examinations are classified under "other training".

16. *Miscellaneous Cultural Organisations and Entertainment Industry*

Employers such as the Arts Council, B.B.C., British Council, commercial television companies, theatres, cinemas, and private museums, libraries and art galleries are included here. Public museums, libraries, and art galleries are included under either Home Civil Service or Local Government Authorities.

17. *Others*

This is a residual category of employers which do not fit readily in the other categories. Examples are Y.M.C.A., family service units and Field Studies Council. It also includes Industrial Research Associations.

* Central Statistical Office; Standard Industrial Classification—Revised 1958. Published by Her Majesty's Stationery Office.

APPENDIX I

DEGREE SUBJECTS

1. General notes

In deciding whether a degree should be classified as arts and social studies, pure science or applied science, the determining factor has been the course content rather than whether a B.Sc. or B.A. is awarded. Thus all degrees in mathematics, whether B.A. or B.Sc., are included in the pure science tables under the heading mathematics. Similarly graduates with B.Sc. degrees in geography or psychology are included in the arts and social studies tables under the appropriate headings.

The degree subject headings used in the tables do not correspond exactly with the terminology used in all universities. Thus, for the purpose of these tables, a degree in biblical studies is included under the heading of theology; a degree in sociology is included under social studies.

Combinations of foreign language and literature subjects and of languages with area studies are classified under one of the headings—2 (a), 2 (b) and 2(c) below. Where several subjects are studied to the same level in the final year such degrees are shown under the heading "Combined or General Courses" which are referred to in greater detail in notes 2 (f) and 3 (a). The headings under which various uncommon degree courses are classified are given in the notes 2 (g), 3 (b) and 4 (b). Where there is a change of degree subject in the degree course (e.g. as often occurs in the Cambridge Tripos system) the degree is usually classified according to the subject(s) offered in the final examination.

2. Arts and Social Studies

The following notes define those degree subject headings used in the tables which are not self-explanatory:—

(a) *Modern West European Languages*

In addition to the usual university courses in French, German, Spanish, Portuguese, and Italian, this heading also covers degrees awarded in Scandinavian languages, Dutch and Welsh.

(b) *Slavonic and East European Languages and Area Studies*

Russian is the principal subject in this group, but degrees awarded in Polish, Finnish and Hungarian, etc., are also included.

(c) *Oriental and African Languages and Area Studies*

This heading includes, e.g., degrees in Chinese, Turkish, Persian and Arabic and in African Studies.

In all these groups the study of language and literature are generally, though not necessarily, combined. Within the principal groups the subjects may be studied singly, e.g. French language and literature only, or in combination, e.g. Spanish and Portuguese language and literature. Courses in which the study of a language is associated with an area study, e.g., the study of Chinese language, Chinese history and economic development combined, are also included under these headings.

(d) *Commerce*

These are defined as degrees which exempt their holders from the whole of the intermediate examinations of the various accountancy institutes.

(e) *Combined or General Courses*

(i) *Arts*

These are defined as courses in which two or more of the following subjects are combined:—

American Studies	Fine Art	A modern language or languages
Classics	Geography	Music
Drama	History	Philosophy
English		Theology

(ii) *Arts/Economic/Social Studies*

American Studies	Fine Art	A modern language or languages
Classics	Geography	Music
Drama	History	Philosophy
English		Theology

are combined with one or more of the following subjects:—

Anthropology	Law	Psychology
Commerce	Politics	Social Studies
Economics		

(iii) *Economic/Political/Social Studies*

These are defined as courses in which two or more of the following subjects are combined:—

Anthropology	Law	Psychology
Commerce	Politics	Social Studies
Economics		

*No. of graduates
where known
(i.e. included in
Tables 1-5)*

(f) *Degree subjects not listed in the tables*

Archaeology	..	..	Included under History	..	—
Celtic	..	..	"	" Other subjects	..
Drama	..	..	"	"	..
Estate Management	..	..	"	"	..
Fine Art	..	..	"	"	.. (88)
Music	..	..	"	"	.. (136)
Philosophy	..	..	"	"	.. (96)
Physical education	..	..	"	"	..
Politics	..	..	"	" History	..
Slavonic/West European and rare combinations of languages	..	..	"	" Other subjects	.. (68)

3. *Pure Science*

(a) *Physical and Biological Sciences*

For the purpose of grouping in the various combined courses the physical sciences are defined as mathematics, physics, chemistry and geology. All other science subjects are regarded as biological sciences.

*No. of graduates
where known
(i.e. included in
Tables 1-5)*

(b) *Degree subjects not listed in the tables*

Astronomy	..	..	Included under Mathematics	..	—
Bacteriology	..	..	"	" Other subjects	.. (16)
Genetics	..	..	"	" Botany	..
Household science	..	..	"	" Other subjects	..
Microbiology	..	..	"	"	.. (12)
Nutrition	..	..	"	" Biochemistry	..

4. *Applied Science*(a) *Agriculture*

Degrees in agricultural botany, agricultural chemistry, agricultural microbiology, agricultural zoology, animal husbandry, agricultural production, agricultural engineering and agricultural economics are included under the heading of "agriculture" whether these subjects are studied singly or are combined.

			<i>No. of graduates where known (i.e. included in Tables 1-5)</i>
<i>(b) Degree subjects not listed in the tables</i>			
Applied Chemistry	..	Included under Chemical Engineering.	—
Art/Architecture	..	Included under Architecture and Town and Country planning.	—
Electronics	..	Included under Electrical Engineering.	—
Mining	..	Included under Other Applied Sciences.	(92)
Textile Technology	..	Included under Other Applied Sciences.	—



UNIVERSITY GRANTS COMMITTEE

FIRST EMPLOYMENT OF
UNIVERSITY GRADUATES
1961—1962



LONDON
HER MAJESTY'S STATIONERY OFFICE
1963

FOREWORD

By SIR KEITH MURRAY,

Chairman of the University Grants Committee

It is clearly of importance to know what careers are followed by men and women when they graduate from the universities; it is important to the nation, to industry and the professions, to the universities, and to parents, schools and school pupils. The University Grants Committee have, with the assistance of the Universities, collected information for a number of years on the various kinds of employment (including further education or training) entered into by university graduates, but they have hesitated to publish the results until they were certain that the returns were sufficiently comprehensive and had achieved sufficient validity to warrant their publication. The data have been collected for five years in the form in which they are now published and the Committee consider that they now give a fair representation of the careers followed by university students on completing their first degree course.

The present publication relates only to the employment of graduates on taking their first degrees. Corresponding statistics for those who take higher degrees are not yet sufficiently established to command the confidence attaching to the figures of those with first degrees. The collection of such information is hampered by the fact that a number of men and women take their higher degrees when they are already in employment, having completed full-time research or postgraduate work at the universities some while earlier. It has therefore been decided that it would be advisable to defer publication of details relating to men and women who take higher degrees until further attempts have been made to improve them.

The Committee wish in particular to thank the University Appointments Officers and their staffs who have, over the years, collected the basic details and forwarded their returns to the Committee; they have devoted a great deal of time and energy to this work over and above their normal work and their help is greatly appreciated and valued. The Committee are also greatly indebted to the University Appointments Officers' Statistics Committee for advice on the interpretation of the material.

June, 1963.